



UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE
United States Patent and Trademark Office
Address: COMMISSIONER FOR PATENTS
P.O. Box 1450
Alexandria, Virginia 22313-1450
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/806,804	03/23/2004	Hung-Cheng Tsai	06733/0201049-US0	2903
7278	7590	11/22/2005	EXAMINER	
DARBY & DARBY P.C. P. O. BOX 5257 NEW YORK, NY 10150-5257			LUGO, CARLOS	
			ART UNIT	PAPER NUMBER
			3676	

DATE MAILED: 11/22/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

10/806,804

Applicant(s)

TSAI, HUNG-CHENG

Examiner

Carlos Lugo

Art Unit

3676

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 24 March 2004.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-7 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-7 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 24 March 2004 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|---|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413) |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | Paper No(s)/Mail Date. _____ |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08) | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| Paper No(s)/Mail Date _____ | 6) <input checked="" type="checkbox"/> Other: <u>attachment #1</u> . |

DETAILED ACTION

Claim Rejections - 35 USC § 103

1. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

2. **Claims 1-7 are rejected** under 35 U.S.C. 103(a) as being unpatentable over US Pat No 6,386,602 to Lan in view of US Pat No 4,728,133 to Valley and in view of US Pat No 2,208,592 to Mariani.

Regarding claims 1 and 2, Lan discloses a door lock comprising a lock housing (1 and 16) adapted to be mounted on a door panel and formed with a mounting hole that has a hole axis.

A latch bolt (not shown) adapted to be mounted on the door panel and operable for movement between a latching position where the latch bolt is extended relative to the door panel, and an unlatching position, where the latch bolt is retracted relative to the door panel.

An operating spindle (not shown) coupled to the latch bolt and rotatable between a first angular position, where the latch bolt is at the latching position, and a second angular position, where the latch bolt is at the unlatching position.

A coupler (2) is mounted rotatably on the lock housing and includes a first coupling portion (left side of 2 on Figure 1) that extends into the lock housing through the mounting hole (Figure 3) and that is coupled to the latch bolt, and a second

coupling portion (right side of 2 on Figure 1) that is opposite to the first coupling portion and that is disposed externally of the lock housing (Figure 3). The coupler is capable of driving rotation to the operating spindle between the first and second angular positions.

A restoring mechanism is provided for biasing the coupler to rotate the operating spindle from the second angular position to the first angular position. The restoring mechanism includes a torsion spring (15) mounted in the lock housing and having a first spring end acting on the lock housing, and a second spring end acted upon by the first coupling portion of the coupler.

A door handle (3) including a handle sleeve that is sleeved fittingly and removeably on the second coupling portion of the coupler, and a lever that extends outwardly and radially from the handle sleeve. The lever extends sideward when the operating spindle is at the first angular position and is operable so as to rotate the door handle downwardly relative to the lock housing such that the coupler drives rotation of the operating spindle from the first angular position to the second angular position (Figures 2 and 4).

A tongue and a groove arrangement (26 and 31) are provided between the second portion of the coupler and the handle sleeve of the handle.

Lan also discloses that the second coupling portion of the coupler has a circular cross-section, the handle sleeve of the door handle including a base wall, and a surrounding wall extending from a periphery of the base wall.

However, Lan fails to disclose that the door lock further comprises fastening means for fastening removeably the handle sleeve of the door handle on the second coupling portion of the coupler.

Mariani teaches that it is well known in the art of latches to have a handle (24) wherein a coupler (25) is fastened by means of a screw (46) to the handle. Mariani teaches that the fastening means includes a screw hole formed through the second coupling portion of the coupler (at the end of the second coupling portion 44) and a threaded hole formed in the base wall of the handle sleeve (48) of the door handle, and a screw fastener (46) that is inserted through the screw hole and that is threaded into the threaded hole.

It would have been obvious to one having ordinary skill in the art of latches at the time the invention was made to provide the engagement of the handle sleeve and the coupler described by Lan with fastening means, as taught by Mariani, in order to secure the coupler to the sleeve.

Further, Lan fails to disclose that the tongue-and-groove arrangement including a set of angularly spaced apart grooves formed in an inner wall surface of the handle sleeve. Lan discloses that the handle sleeve has only one groove.

Valley teaches that it is well known in the art of latches to have a connection between a coupler (28) and a handle sleeve, wherein the connection includes a tongue-and-groove connection, wherein the coupler includes at least one tongue (at 28a) and at least one groove at the handle sleeve so that the handle is capable of

being positioned with respect to the coupler at any desire position (see attachment #1).

It would have been obvious to one having ordinary skill in the art of latches at the time the invention was made to provide the coupler-handle sleeve connection described by Lan with a coupler-handle sleeve connection having at least one tongue connected to at least one groove, as taught by Valley, in order to position the handle at any desire position.

As to claim 3, Lan illustrates that the second coupling portion of the coupler has a frustoconical shape.

As to claim 4, Lan, as modified by Valley, teaches that the set of angularly spaced apart grooves includes first and second grooves that are disposed on opposite sides with respect to the hole axis.

As to claim 5, Lan, as modified by Valley, illustrates that the hole axis lies in a horizontal plane. The first groove is disposed such that a first imaginary line radiating from the hole axis to the first groove forms a first angle with respect to the horizontal plane. The second groove is disposed such that a second imaginary line radiating from the hole axis to the second groove forms a second angle with respect to the horizontal plane.

As to claim 6, Lan as modified by Valley, teaches that the second angle is equal to the first angle.

As to claim 7, Lan, as modified by Valley, illustrates that each of the first and second angles could be in a range from 3 to 5 degrees.

Conclusion

3. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Carlos Lugo whose telephone number 571-272-7058. The examiner can normally be reached on 9-6pm EST.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Brian Glessner can be reached on 571-272-6843. The fax phone number for the organization where this application or proceeding is assigned is 571-272-7049.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is 703-306-5771.

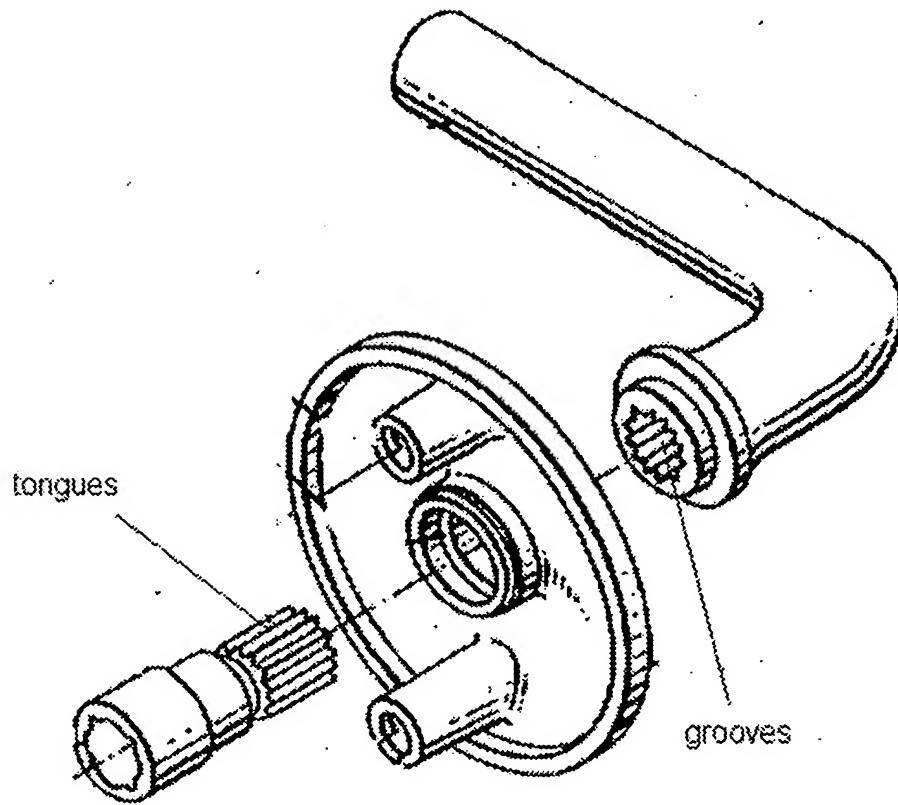
C.L.

Carlos Lugo
AU 3676

November 3, 2005.



**BRIAN E. GLESSNER
SUPERVISORY PATENT EXAMINER**



Attachment #1